# ARCHAEOLOGICAL RECONNAISSANCE SURVEY CAPE KINAU, MAUI: FROM KA LAE MAMANE TO THE KUALAPA SITE COMPLEX

CHAMINADE UNIVERSITY OF HONOLULU BEHAVIORAL SCIENCE SUMMER FIELD SCHOOL JUNE 1990

by

Richard Bordner
7/24/90

#### ARCHAEOLOGICAL RECONNAISSANCE SURVEY

CAPE KINAU, MAUI: FROM KA LAE MAMANE TO THE KUALAPA SITE COMPLEX

CHAMINADE UNIVERSITY OF HONOLULU SUMMER FIELD SCHOOL, JUNE 1990

#### Abstract

From June 7-10, 1990 the Chaminade University of Honolulu Summer Field School conducted a series of archaeological reconnaissance surveys in the area between Wailea and Kanaloa, Maui. The major effort was in the initial identification and spatial pattern of sites at Cape Kinau, with secondary effort in initial culture resource assessment along the Hoapili Highway from Keone'o'io to Kamanamana, and from Kanaio Prison Camp to Kanaio Church. In all cases the density and complexity of sites located demand that both more intensive archaeological and historical research be conducted in the area from Wailea to the Kaupo Gap, and that a major attempt be made to develop a synthetic compendium of archaeological and historic sites along this coast.

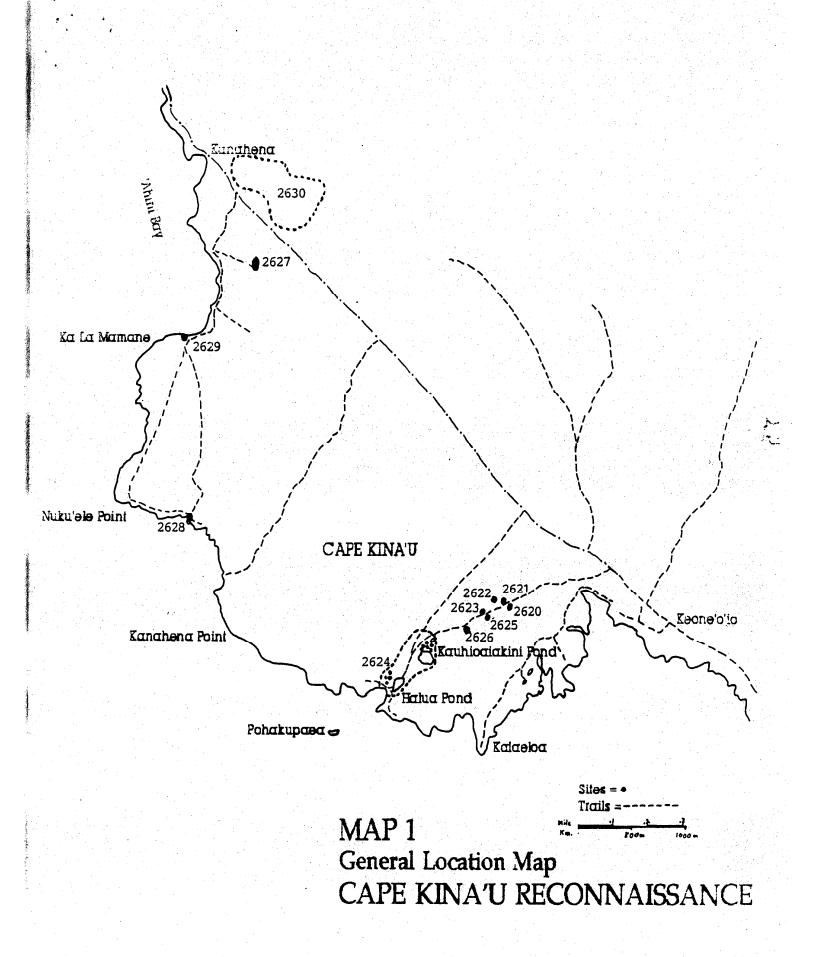
#### Introduction

As part of the 1990 Chaminade University of Honolulu Summer Field School in June, 1990, a series of archaeological reconnaissances were conducted along the southwest coast of Maui. The field crew consisted of a team of 5 (Dr. Bryan Man, Maricela Buelna, Theresa Glen, Heather Hays and Page Thorndike) and the Field Investigator (Richard Bordner).

The major focus of the fieldwork was at Cape Kinau, specifically the area around the Kauhioaiakini-Halua Pond Site Complex, and Nukuele Point. A pair of supplementary reconnaissances were also conducted: the first along the Hoapili Highway from Keone'o'io to 1 km. beyond Kamanamana; the second from Kanaio Prison Camp to Kanaio Church along the existing road.

## Cape Kinau Archaeological Reconnaissance

This reconnaissance was a expansion of the mapping project conducted by Chaminade University of Honolulu Field School at the Kualapa Site Complex in



June 1988. One of the results of the 1988 field school was the identification of the relationship between paths-trails and archaeological sites—
archaeological sites were identified by formal trails or casual paths which led from the formal trails along paths to specific sites. We also noted the relationship between archaeological sites and available fresh water.

As a result of the earlier survey, this study focused on existing formal trails and subsidiary paths for the majority of analysis. In addition occasional forays were made off the trails to assess resources in those areas without visible paths.

Section A was based on a traditional trail which appears to run from Kalua o Lapa (mauka) to Halua Pond (makai). This trail consists of a cleared path with larger material tossed to the side, with crushed ili'ili as base course. pahoehoe and waterworn stepping stone were set in the base course, and coral clumps were set along the trail. The trail was followed from Kihei Road makai to the Halua Pond section of the Cape Kinau coastline.

Section B was structured around a traditional trail which runs from Kanahena to between Nukuele Point and Kanahena Point along the coastline.

Section C was a short reconnaissance along a traditional trail which runs roughly parallel and mauka of Kihei Road, which intersects with the Kanahena Point-Kalua o Lapa traditional trail.

Section A: The trail which is the basis of this section of the reconnaissance runs from Kihei Road just Makena side of the modern property boundary and continues behind Kauhioaiakini Pond over to the coast at Halua Pond. A complex series of secondary paths radiate out from this central feature, which appears to have been the main traffic route for this section of the Cape Kinau population. The mauka portions of the trail were noticeably absent of visible archaeological sites, and subsidiary paths were limited in

number and focused on caves. These caves may have served either as burial caves or as water-collection stations, but the existence of paths would suggest the latter rather than the former, as the paths require a fair amount of traffic to become visibly defined on the a'a lava. As one of our informants noted, along this section of the coast a system of calabash collection stations for water seepage was a main source of potable water.

Within 40m of Kauhioaiakini Pond a sudden increase in site density was noted, with a commensurate increase both in variety and complexity of sites.

The area from Kauhioaiakini Pond to the coast at Halua Pond is one very large and complex habitation and resource exploitation complex.

Specific sites located were (see Map 1):

Site 2620: A small cave shelter .8m x .7m x .5m, interior cleared of loose material which has been stacked at the mouth as a protective wall .4m high. No midden visible. Located 10m off of the trail to the south.

Site 2621: A possible burial cave .9m x .7m x 1.4m, very typical of the tube-cave features found throughout this flow. These features number literally in the hundreds, show no signs of visible human modification or midden, and yet would be logical places for either burial or access to seepages. However they are not defined by path access and so they have not been noted in this study (with this one serving as type example). This particular cave is located approximately 25m north of the trail.

Site 2622: A cluster of of cleared and paved habitation shelters, on the lee side of several large pahoehoe plates upturned by ridge buckling. This site has two major features: 2622(A) is a paved area 1m x 2m x .5m(under the overhang). The area has been cleared and leveled, and has a stacked a'a facing wall .4m high. It is connected with the main trail and 2622(B) by a well-worn path. 2622(B) is a paved area 1.5m x 1.5m x .6m(under overhang). The area has been cleared and leveled, and has a stacked facing wall which goes up to .5m high. Neither units exhibited any visible midden. This site is located approximately 50m northwest of the trail.

Site 2623: A shelter cave and burial (?) cave. The shelter cave is a cleared bubble shelter 1m x 2m x 1.5m, with the cleared material stacked at the opening in a single course .3m high. The burial cave exhibits no visible human modification, but as per site 2621 is probable both in position and form to a likely burial or seepage cave. The site is located 15m to the west of the trail.

Site 2625: A cleared paved area and associated caves. The cleared area is approximately 1.5m x 1m with several coral fragments and some shell midden. Approximately 6m away are several bubble shelter caves, both portions of a

large tube which has had roof collapse to isolate two units each 3m x 1.7m x 3m. These caves have scattered shell midden, and in the interior portions both have some soil deposit. The collapsed ends of both caves appear artificial, but there was not time to investigate further.

Site 2626: A windbreak shelter wall and C-shape shelter wall along trail. The windbreak shelter wall is  $1.5m \times .4m \times 1m$ . The C-shape shelter is  $2m \times .3m \times .6m$ . Both are constructed of stacked a'a, possibly from the trail clearing. No midden was noted at either feature.

Site 2624: Kahioaiakini Pond—Halua Pond complex. From approximately 35m on the trail mauka of Kahioaiakini Pond a large number of paths, subsidiary stepping—stone trails, cleared areas, C—shape shelters and midden scatters manifested themselves. This complex pattern of use continues along the trail all the way to the coast at Halua Pond. While the features do not exhibit the complex formal built structure of the Kualapa cluster (site 1385) the total number of features is much greater. Neither pond appears to have served as a fishpond proper, though they still have both 'opae and native birds (two nesting pair of Hawaiian Stilts (Ae'o) and a pair of Koloa Mapu were observed at the pond).

Halua Pond is separated from the ocean only by a berm of beach deposit material (3m above sea level), and may have been open to the sea in the past. The complex of features continues around both sides of the pond and over 50m to the northwest (40m from the coast) where further features cluster around a series of small brackish-water ponds (minimum of 8).

The entire pond complex exhibits a number of habitation features along with pond and coastal exploitation, and while it does not exhibit the formal built features of the Kualapa cluster it does have a large number of bubble cave shelters which provide adequate habitation, especially given the persistent high winds at this location.

Section B: The trail from the Kanahena site complex to between Nukuele Point and Kanahena Point is the same in structure and construction as the one to the Kauhioaiakini-Halua Pond complex. The portion that we conducted the reconnaissance along was the section that runs cross-country to the coastal end.

The initial reconnaissance was east of the trail, as a series of subsidiary trails and paths led to a elevated section of the flow which contained a fair amount of vegetation. Upon closer examination this raised flow was seen to be honeycombed with tubes and collapsed bubbles, and apparently has significant seepage which encourages successful vegetation (kiawe, koa haole and grasses). This flow had a cluster of features (designated Site 2627) around the edges, exploiting the collapsed tubes and

bubbles both for shelter and apparent water collection stations (reflecting the density of trails-paths observed).

Both on top of this raised flow, and then cross-country back to the trail no sites were noted, though several paths paralleled the linking together of the Site 2627 cluster and the main trail. Along the main trail no sites were noted till the end point at the coastline. This would seem to be due to two factors: 1) a large number of tube and bubble caves were noted, but none had visible midden. These features that were not closely examined may have been reflective of the ambiguous features noted earlier as Site 2621. 2) the lack of either brackish ponds or fishpond activity along this portion of the coast meant that traditional exploitation was of the fishing and coastal gathering, rather than more concentrated aquaculture seen at Kualapa or Kauhioaiakini Pond. The fact that the only major water seepage systems were mauka, combined with the older material (and greater water availability) around Kanahena may have made this section of the coast less attractive for permanent habitation versus seasonal and temporary exploitation.

Specific sites located were (see Map 1):

Site 2627: This complex of features are located along the lower edges of a raised section of the recent lava flow, which is noted both by the large pahoehoe plates tossed about and the tremendous number of both tubes and bubbles present (this in contrast to the lower material, which is smaller, more evenly sorted a'a). The majority of features consist of two forms—either bubble/tube shelters with partially cleared interiors with cleared material stacked at the entrance; or largely unmodified tube sections which have paths leading to them and vegetation around and appear to have been water collection points. No midden was noted in any of the features examined.

Site 2628: A low bubble shelter located at the side of a small bay at the coastal end of the trail. The shelter is  $2m \times 1.8m \times 2m$  with built-up stacked sides to act as windbreaks (.5m high), and contains both a significant soil deposit, coral pieces, shell midden and 2 pencil wana files.

Site 2629: Site 2629(a) is a cleared rectangular area with ili'ili paving 1.2m x 1m. It is located 8m towards Ka Lae Mamane from the grove of trees along the coast. The cleared area is protected from the prevailing winds by a rock overhang, and while there are substantial coral fragments

there is no midden visible.

Site 2629(b) is a pair of shelter bubble caves on the shore 4m inland from site 4410. The caves are approximately 4m x 1m x 1.3m with heavy vegetation. While there is a substantial beach deposit with coral and shell, this material appears to be beach transport rather than cultural material. No midden noted.

## Section C:

Site 2630: A extensive early historic (?) trail system and associated features on the 1790 flow which parallels the existing jeep road in sections. The trail has extensions which run approximately mauka-makai, though their main purpose seems to be to link water sources to the shore-front habitation areas. The trails are quite well-made, and of the same form as those found near the shore at Cape Kinau, being .7m wide, with loose material stacked at the sides of the trail, with placed pahoehoe and waterworn slabs as stepping stones, with occasional coral pieces placed as visual markers. In most sections this trail seems wider than those found near the Cape Kinau shore. The trail intersects and is separated by a poorly-stacked boundary wall of a'a material which roughly parallels the existing jeep road. 250m further down the trail and bearing to the northeast the trail divides near a occasional streambed. One section of the trail ends 8m away at a well-stacked cistern which has been filled in. The cistern measures 1.5m in diameter, and a minimum of 1.6m deep, of stacked a'a. The other trail section leads to the occasional streambed and possible spring with heavy vegetation. In this section there are small cleared areas and poorly-stacked short wall sections suggesting permanent agricultural exploitation of this water.

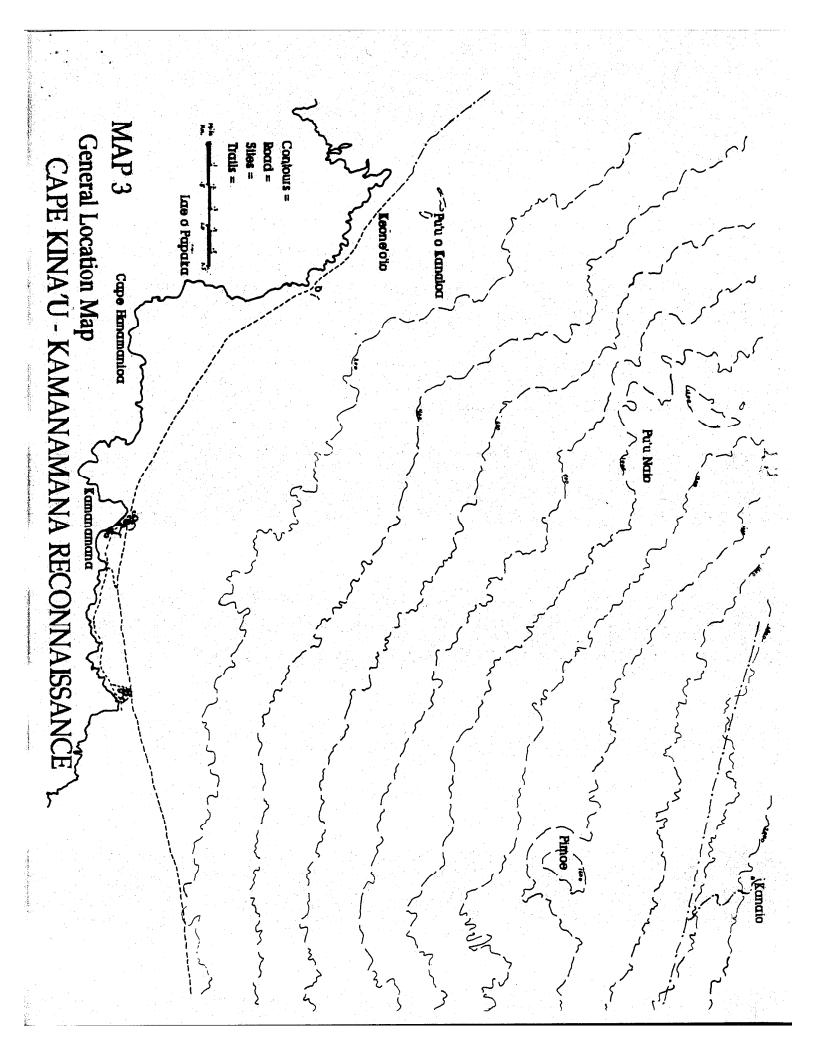
The section of the trail running parallel to the road back towards Makena also veers off towards a occasional streambed with apparent spring, where it

ends in an area of possible seasonal agricultural exploitation.

Hoapili Highway Initial Reconnaissance—from Keone'o'io to Kamanamana Beach.

On June 9, 1990 the field school conducted an initial archaeological assessment reconnaissance of the lower section of the Cape Kinau-Nu'u section of south Maui, specifically the initial section from Cape Kinau to Kamanamana Beach. Due to time constraints we conducted the reconnaissance along the line of the Hoapili Highway.

There was a notable absence of visible sites along the initial section of the highway from Keone'o'io across Cape Hanamanioa other than a number of trails. Several trails parallel the highway, while others bear off either mauka or makai. The trails are all traditional in construction and appearance, cleared of loose material with fitted stepping stones and occasional coral markers. One substantial (.7m + wide) trail parallels the



Hoapili Highway, and must logically predate the highway. Of interest is that the highway did not follow the line of the older trail, which would have required less effort, but chose to parallel it instead. As the trails are in most locations less than 5m apart, the rationale for building the highway away from the older trail are hard to fathom.

Given the pattern of trails and their construction, the patterns of water availability and coastal resource noted for Cape Kinau seem to hold true for the Capa Hanamanioa region also. The first significant change in human exploitation occurred when the Hoapili Highway drops off the new flow (1790) down to the older material at Kamanamana Beach. With the increase in soil and a more level area, especially along the coast, there is a spectacular increase in archaeological features.

Site 4413: This site complex is a summary one to include the extremely large integrated pattern of dispersed habitation and agricultural features from Kamanamana Beach towards Pohaku Eaea. At the Kamanmana Beach proper (the first exposed embayment after dropping off the 1790 flow from Cape Hanamanica) there is a cluster of enclosures and habitation structures in excellent condition. There is a minimum of 3 large enclosures (up to 6m in diameter) with stacked a'a walls up to 1.2m high. They are tied into a complex of walls and platforms (many with ili'ili paving) along the beach front. A series of parallel walls possibly represents a canoe landing location, though it would be difficult for a cance of any size to approach the location due to offshore reefs. On a slight rise overlooking the beach proper is a series (a minimum of 3) of well-preserved habitation enclosures of stacked core-filled a'a will internal divisions and ili'ili paving. Several of the walls are still over 2m in height, with all interior construction intact and in excellent preservation. The presence of soil around the features, and the presence of shell midden, wana files and basalt flakes indicate that strong possibilities for valuable excavation may exist within this cluster.

After this dense cluster of features the pattern returns to one of trails and occasional enclosures near to the shoreline. Near to Kamanamana Beach is a area of pahoehoe lava which is suitable for petroglyphs, though we were unable to note any other than historic graffiti (some apparently Hawaiian names that appear to be from the late 1800's). However the integration of trails, wall sections and occasional enclosures (along with apparent bubble—shelter habitation caves) suggest a continuous occupation pattern along this section of the coast. At .5km down the coast from the Kamanamana cluster is a spectacular series of walled enclosures, paved habitation enclosures, walls and trails which surround a series of brackish and fresh water springs. The largest contains very old and large 'hala trees and a variety of vegetation including sweet potato. This apparent village complex is linked by the

MAP # Z

GENERAL LOCATION MAP

KANAHEMA - KA LAE MAMANE

RECONAISSANCE

presence of water running mauka-makai to the coast. This has resulted in a site complex equal in size and complex equal to that of Keone'o'io, though the preservation here is much superior to that of Keone'o'io due to the lack of modern traffic. A series of large trails from this point running mauka suggests that the site complex may continue upslope, but we were unable to verify this.

It is worth noting that the density and complexity of sites along this section of the coast is greater than that found in the area of Cape Kinau, though due to limits of time we were unable to in detail map any features. This would suggest that either there is more water along this portion of the coast, or that the resources were sufficiently superior to lure a larger population down here. The continuing density of features visible beyond the series of springs (where we ended the reconnaissance) suggests that this site density may continue along the coastal region at least as far as Kanaloa, if not as far as Nu'u.

### Conclusions and Recommendations

As noted earlier the major portion of the efforts of the field school were upon the further definition of the pattern and condition of archaeological sites in the Cape Kinau area. The sites noted fall into several very discrete categories, with almost no variation:

- a) trails which connect coastal areas to areas mauka, or coastal sites with water sources, or coastal sites with each other;
- b) short-term habitation features, usually opportunistic exploitation of gaseous a'a lava flow which left substantial partially collapsed bubbles and tubes throughout the area, which provide both shelter and water seepage for human use;
- c) coastal shelters for exploitation of marine resources, similar in form to 'b' above, though with shell midden.
  - d) possible burial locations hidden in bubbles, crevices or collapsed tube

sections.

The only variation in terms of more substantial features were those constructed in the presence of large amounts of brackish/fresh water, such as at Kauhioaiakini and Halua Ponds, where a larger and possibly permanent population took advantage of the presence of water and the marine resources. Given the known historic date of the lava flow which these sites reside on, it provides an interesting view of traditional Hawaiian practices of residence and resource exploitation in the period on initial European contact.

This is in contrast to the pattern of features found in the final reconnaissance along the Hoapili Highway, which would seem to reflect an older and more established community (especially at Kamanamana Beach). The increasing site density and complexity, combined with the excellent preservation of most of the features, suggest that a area of primary research focus in the Hawaiian Islands should be along the coast from Cape Kinau to Nu'u, one of the few extensive coastal sections left in the main islands which has seen limited impact in the post-contact period. A short interview with a member of the Kanaio community reinforces this perception, as he noted the density of sites continues mauka to Kanaio and even further upslope. Within the view of the foreground of Kanaio Church at least 4 paved platforms and enclosures were visible, along with numerous walls and trails, many of which appear to predate Ulupalakua Ranch activities. Other than some destruction by military use of firing ranges (for example burial disturbance at the Kanaio-Pimoe firing range) this coast sees little activity other than limited ranching and coastal recreational fishing at present. This section of the coast offers a unique opportunity to examine in detail the mauka-makai ahupua'a relationships along a dry coast in a level of detail unavailable elsewhere.

It is recommended that a comprehensive integrated research design be developed covering archaeological, historical and modern socio-cultural integration of the changing cultural landscape of the leeward Maui coast from Cape Kinau to Nu'u be developed. Given the encrochment of development on the Makena region, this area will rapidly be undergoing increasing traffic, resulting in increasing vandalism, site destruction and loss of the cultural heritage of this region. In an area devoid of any major research this lack must be met now, rather than waiting until the impacts have taken place.

# Bibliography

- Bordner, Richard & David Cox 1981. "Makena Gold Course Extension: Archaeological Reconnaissance", by SRSCo-op ms for EISC, 10/81.
- Farrell, Bryan H. 1982. <u>Hawaii</u>, the <u>Legend that Sells</u>. Univ. Press of Hawaii: Honolulu.
- Kamakau, Samuel M. 1976. The Works of the People of Old: Na <u>Hana a ka Po'e Kahiko</u>. Bernice P. Bishop Museum Special Pub. 61. Bishop Museum Press: Honolulu.
- Kirch, Patrick V. 1985. <u>Feathered Gods and Fishhooks: An Introduction to Hawaiian Archaeology and Prehistory</u>. Univ. of Hawaii Press: Honolulu.
- Sinoto, Aki 1981. "Report On: The Phase I Archaeological Survey of a Proposed Golf Course at Makawao, Maui: Second Increment: Fairways 2-6 and 'Ulupalakua Road Realignment, May 1978", ms #021081 by Bernice P. Bishop Museum for Seibu Hawaii, Inc., 2/81.
- Thrum, Thos. G. 1917. "Maui's Heiaus and Heiau Sites Revised", in <u>Hawaiian Annual and Almanac for 1917</u>. T. Thrum: Honolulu. pp. 52-61.
- Youngblood, Ron 1983. On the Hana Coast. Emphasis Int.: Honolulu.

# PROPOSAL SKETCH FOR KEONE'O'IO TO KAUPO HOMESTEADS

ARCHAEOLOGICAL INVENTORY SURVEY, CULTURAL LANDSCAPE AND HISTORICAL STUDY

## Submitted by

Richard Bordner Chaminade University of Honolulu

## Abstract

This proposal sketch has been developed at the request of C. Keau and is designed to answer the need for a comprehensive survey of the archaeological and historical resources of this section of island of Maui. In order to discuss these resources a multi-disciplinary approach is necessary-the integration of historical, ethnographic and archaeological approaches will provide the most efficient and effective means of surveying this 20 mile section of East Maui. This research proposal is designed to address 3 major needs: 1) the need for a integrated 100% inventory survey of archaeological and historical resources for this section of Maui; 2) the collection of oral histories and local records reflecting changing views of the cultural landscape and integration into the world view; 3) development of a computerized database reflecting both the informational and graphic results of the survey that will accessible to both planning agencies and community groups in the future.

#### Introduction

This proposal is based on a request by Charles Keau for a research proposal that would eventually cover a section of the East Maui coast from Keone'o'io (ahupua'a of Kalihi) to Kaupo Homesteads (ahupua'a of Mikimiki), a distance of approximately 20 miles. Initial information on terrain and possible site density was collected during the Chaminade University of Honolulu Summer Field School in June 1990. As a result of this work it is estimated that the area covered should include the region from the coastline (inclusive of off-shore features) up to the 2600 foot elevation-this chosen due to the site density noted at Kanaio (at 2000 feet).

The proposed study is quite large in size and would include most of the area of the following ahupua'a (from Keone'o'io to Kaupo):
Kalihi; Papaka Kai; Kaunauhane; Kaloi; Kanaio; Auwahi; Lualailua; Alena;
Kipapa; Nakaohu; Nakaaha; Mahamenui; Manawainui; Nakula; Nuu; Naholoku; Kepio;
Niumalu; Puulani; Kahuai; Maalo and Mikimiki.

To adequately inventory the cultural resources of this region we see the following tasks as being necessary as an integrated whole:

1) an archaeological site inventory of all features of possible precontact and historic interest under the guidelines of the NPS National Register of Historic Places. Given the area to be covered and the goals of the project the inventory should be limited to a surface survey with compass-tape mapping except for specific sites which require immediate data recovery-a decision that would be made by archaeologists at Historic Sites, DLNR. Areal coverage should 100% due to the limited large-scale information sets available

for this region, which argue against the feasibility of other sampling strategies.

- 2) A historical survey of the changing use patterns within the region from 1590 to 1990 and the place of the region within the Hawaiian Islands as a whole. This survey should include traditional archival sources (State and County) and also available private records that can be accessed, along with oral traditions from past or present residents of the region.
- 3) A cultural landscape survey of the regional identity of place for this section of East Maui. This will be based on both archival sources (english and hawaiian language newspaper articles, journals and letters) and interviews for the purpose of collecting views about the cultural landscape as held by past and present habitants. This will include (but not be limited to) oral histories, named places, areas of group, familial or individual significance, observed patterns of daily land use and regional oral traditions.
- 4) Development of an integrated computerized database including all project information within a format to make it accessible for both governmental agencies for planning purposes and relevant citizen groups such as the Maui Historical Society and the Historic Hawai'i Foundation. The database will be designed to call up information based on either spatial or descriptive parameters.

# Projected Project Schedule

Key to such a long-term project is continuity. We estimate that it will require from 8-10 years to complete the acquisition of data for the project, with an additional 2 years for the final report and summary analysis. In order to provide the continuity we suggest that a full-time office staff including a secretary and the Project Director to handle all coordination with other agencies and individuals. As each segment of the project requires particular technical skills we suggest that a full-time supervisor for each segment of the project. In addition there should be seasonal field crews in each segment, to be supplemented by additional crew from university and high school field schools. A important part of the supervisor's tasks is community education, both by presenting to interested community groups and especially within the educational system to grade school and high school classes. For this reason the yearly field schedules are extended into both the spring and fall periods of the educational year, so that students will have the opportunity to not only see the development of the project in the classroom but will be able to participate in the ongoing fieldwork.

Field Structure and Schedule:

Project Director and Secretary (full-time);

Archaeology Inventory Supervisor (full-time);

Archaeology field crew (1 crew chief & 2 field crew for 7 month per year from April-October);

Summer Field School crew (both Chaminade University and Mauihigh schools);

Spring and Fall high school crew and other volunteers;

Historical Survey Supervisor (full-time);

Historical research team (1 archival, 1 field researcher, both Hawaiian speakers, for 7 months per year from April-October); Summer Field School crew (both Chaminade University and Maui high schools);

Spring and Fall high school crew and other volunteers;
Cultural Landscape Survey Supervisor (full-time);
Landscape research team (2 assistants, at least 1 Hawaiian speaker, for 9 months per year from March-November);
Summer Field School crew (both Chaminade University and Maui high schools):

Spring and Fall high school crew and other volunteers;
Computer Integration and Database Supervisor (full-time);
Input staff (1 assistant, for 9 months per year from March-November);
Volunteer assistants.

## Project Goals

The major goals of this project are four-fold:

1) To collect and synthesize the archaeological, cultural and historical information on this region to develop an integrated view of this section of East Maui;

2) To educate the local population about the cultural resources available in Hawai'i, specifically this section of Maui, and develop more regional identity through both educational presentations and direct community participation;

3) To educate students both at the grade school and high school level about the application of formal education into real-world situations—the value of education in dealing with community and individual needs, especially for part-Hawaiian students;

4) To provide a training ground for students both at the high school and college level in the application of classroom knowledge to real-world experience, both to make education more relevant and to open up exploration into possible career opportunities.

As this proposal is only a brief sketch intended to generate comments and feedback, I would appreciate any comments or suggestions you might have. Please feel free to contact me at 735-4737 or write to me at Chaminade University of Honolulu, Dept. of Behavioral Sciences.

Aloha,

Richard Bordner/Anthropology Chaminade University of Honolulu 3140 Waialae Ave. Honolulu, HI 96816-1578